Experience Real Time Diagnosis with Contrast-Enhanced Ultrasound

A New Imaging Method to Characterize Focal Liver Lesions

- Contrast-enhanced Ultrasound with SonoVue® improves sensitivity by 55% and specificity by 120% for characterization of focal liver lesions compared with unenhanced Ultrasound\(^1\).
- Contrast-enhanced Ultrasound findings with SonoVue® correlates well with those of MRI and CT \(^1,2,3\).
- Low Mechanical Index Contrast-Enhanced Ultrasound better reflects high arterial perfusion of liver metastases than Arterial Phase Computed Tomography \(^4\).

For more information, please, contact: sonovue@bracco.com

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Echocardiography results in an improved signal to noise ratio. SonoVue should only be used in patients where study without contrast enhancement is inconclusive. Echocardiography is a non-invasive imaging technique which uses ultrasound waves to provide a detailed image of the heart. SonoVue is a contrast agent for use in patients with suspected or established cardiovascular disease to provide specification of cardiac chambers and enhance left ventricular endocardial border delineation. Dopper of macrovascular ultrasound SonoVue increases the accuracy in detection or exclusion of abnormalities in central arteries and extracranial carotid or peripheral arteries by improving the Dopper signal to noise ratio. SonoVue is a contrast agent designed to be used with Doppler flow image and the duration of clinically useful signal enhancement in portal vein assessment.

4.1 Therapeutic indications

SonoVue is intended for use in patients with suspected or established cardiovascular disease to provide opacification of cardiac chambers and evaluation of myocardial perfusion in the context of cardiac ischaemia, including: 1 vial containing 25 mg of lyophilised powder, 1 pre-filled syringe containing 5 ml sodium chloride 1.8% with 0.03 ml of SonoVue (approximately 10 times the maximum clinical dose) to human volunteers, the sulphur hexafluoride was cleared rapidly. The mean terminal half-life was 12 minutes (range 2 to 33 minutes). More than 80% of the administered sulphur hexafluoride was recovered in exhaled air within 2 minutes after injection and almost 100% after 15 minutes. In patients with diffuse interstitial pulmonary fibrosis, the percent of dose recovered in expired air averaged 100% and the terminal half-life was similar to that observed in normal lungs.

4.2 Preclinical safety data

The total amount of sulphur hexafluoride administered in a clinical dose is extremely small, (in a 1.2 ml dose the microbubbles contain 16 µl of gas). The sulphur hexafluoride dissolves in the blood and is subsequently exhaled. After a single intravenous injection of 0.02 or 0.3 ml of SonoVue to patients with suspected or established cardiovascular disease, and no serious adverse events were notified. In the event of adverse events reported with SonoVue were, in general, non-severe adverse events. The undesirable effects reported with SonoVue were, in general, non-severe adverse events. The undesirable effects reported with SonoVue were, in general, non-severe adverse events. The undesirable effects reported with SonoVue were, in general, non-severe adverse events. The undesirable effects reported with SonoVue were, in general, non-severe adverse events. The undesirable effects reported with SonoVue were, in general, non-severe adverse events. The undesirable effects reported with SonoVue were, in general, non-severe adverse events. The undesirable effects reported with SonoVue were, in general, non-severe adverse events. The undesirable effects reported with SonoVue were, in general, non-severe adverse events. The undesirable effects reported with SonoVue were, in general, non-severe adverse events. The undesirable effects reported with SonoVue were, in general, non-severe adverse events.